

San Francisco Bay Conservation and Development Commission

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APPROVED MINUTES

May 2, 2024

TO: All Commissioners and Alternates

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653;
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Reylina Ruiz, Director, Administrative and Technology Services (415/352-3638;

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SUBJECT: Approved Minutes of April 18, 2024, Hybrid Commission Meeting

1. Call to Order. The hybrid meeting was called to order by Chair Wasserman at 1:08 p.m. The meeting was held with a principal physical location of 375 Beale Street, San Francisco, California, and online via Zoom and teleconference.

Chair Wasserman stated: Good afternoon, all, and welcome to our almost fully hybrid BCDC commission meeting. My name is Zack Wasserman, and I am Chair of BCDC.

Chair Wasserman asked Ms. Peterson to proceed with Agenda Item 2, Roll Call.

2. Roll Call. Present were: Chair Wasserman, Commissioners Addiego, Ahn, Burt, Eklund, El-Tawansy (represented by Alternate Ambuehl), Eckerle (represented by Alternate Kimball who joined after Roll Call), Gunther, Hasz, Lee (represented by

Alternate Kishimoto), Lucchesi (represented by Alternate Pemberton), Mashburn (represented by Alternate Vasquez), Moulton-Peters, Peskin, Pine, Ramos, Ranchod (represented by Alternate Nelson), Showalter, Tam (represented by Alternate Gilmore) and Belin. Assembly Representative Ting (represented by Alternate John-Baptiste) was also present.

Chair Wasserman announced that a quorum was present.

Not present were Commissioners: Association of Bay Area Governments (Zepeda), USACE (Beach), Department of Finance (Benson), U.S. Environmental Protection Agency (Blake), Contra Costa County (Gioia), Sonoma County (Gorin), Governor (Eisen, Randolph)

Chair Wasserman continued: I do want to note that today all but one of our Commissioners are participating remotely due to construction in the Yerba Buena Room on the first floor of the Metro Center. Under the Bagley-Keene rules we need to have at least one Commissioner present at the Metro Center, which is deemed BCDC's primary physical location. I want to thank Commissioner Karl Hasz for coming into the City today to represent all of us there in the Temazcal Room.

Also, for agenda purposes I want to note we have postponed our discussion of Item 8, the permit application relating to 505 East Bayshore in Redwood City. We plan to take that up at our next meeting.

3. Public Comment Period. Chair Wasserman called for public comment on subjects that were not on the agenda.

Gita Dev spoke: Thank you, BCDC Commissioners and staff. The reason I wanted to take this opportunity with so many Commissioners present was to just

bring to the attention of the whole Commission how much of the shoreline along the peninsula is currently under consideration or under design. And more just for the information.

It is all the way from the airport down to San Mateo Coyote Point. And then leaving aside Foster City, it is Redwood City all the way to Menlo Park. And then leaving East Palo Alto and Palo Alto there is a feasibility study starting up for all of Moffett Field, Sunnyvale, down to Alviso, where work is actually ongoing. So, it is a large part of the coastline.

In addition, the Design Review Committee has been looking at projects in Burlingame, in Belmont, in Redwood Shores. Yes, I would say those are the ones. I just wanted to bring it to the Commission's attention since there are a lot of the Commissioners present, how much is actually being designed right about now along the peninsula. That's all. Thank you very much.

Chair Wasserman thanked Ms. Dev and moved to Approval of the Minutes.

4. Approval of Minutes of the April 4, 2024 Meeting. Chair Wasserman asked for a motion and a second to adopt the minutes of April 4, 2024.

MOTION: Commissioner Nelson moved approval of the Minutes, seconded by Commissioner Gilmore.

The motion carried by a voice vote with no abstentions.

5. Report of the Chair. Chair Wasserman reported on the following:

Administrative Comments. The first item is administrative. Since Commissioner Eisen is out of the country I have asked Commissioner Gilmore to act as Vice Chair of our meeting this afternoon. Thank you for doing so. I hope the

technology I am using today does not require you to step in, but I appreciate your willingness to do so if I have a technical failure.

Commissioner Randolph has been kind enough to agree to act as our Vice Chair during our hybrid meetings in the month of May, actually both hybrid and physical.

I do want to remind Commissioners that the second meetings in May and June will also be hybrid because of construction at the Metro Center. The first meetings in those months will be hybrid meetings where we will have people physically present at the Metro Center. I encourage you, particularly for the first meeting in May, for as many as possible for you to be there. We have a full agenda that I would like to make what we have labeled an anchor meeting where as many of us as possible are present in person.

I also on an administrative issue want to announce an upcoming change to our meetings' order of business. We are going to set up procedures that will allow us to approve stipulated enforcement settlement agreements much more quickly than we have in the past. I have asked in that regard for staff to create a consent calendar. Almost all of you are familiar with those in your own local jurisdictions. BCDC has not used one. I do not know the historical reasons for that, but I think in efficiency we can do that.

We plan to place both minutes and any stipulated enforcement judgments on that consent calendar. There may be other matters that we deem minor enough to put on there.

Like consent calendars you are familiar with, any Commissioner will be able to ask an item taken off the calendar and agendized at that meeting for full discussion

and we will have public comment on the consent calendar as well. Staff is now working on this issue, and we expect to have a more detailed explanation of the process and hopefully start implementing it in a couple of weeks.

Next Meeting. Our next meeting will occur in two weeks on May 2; it will be an action-packed meeting. As I stated, I hope all of us or as many as possible can attend in person. At that meeting we expect to take up the following matters:

1. Consideration of a permit application for a development at 505 East Bayshore in Redwood City, which was postponed from today's agenda.
2. Consideration of an enforcement case in the city of Richmond.
3. A briefing from the Metropolitan Transportation Commission on its plans for extending the pilot project on the Richmond-San Rafael Bridge that now includes a bicycle lane.
4. A briefing by our staff on the recent Sediment Management workshops that are leading the Commissioner Sediment Working Group toward creating new policies designed to increase the use of sediment as a part of adapting to rising sea levels.

New York Times Article: There was an article in the *New York Times Climate Newsletter*, not all of you may have gotten or seen that today, which I would label bad news and good news. It talked about a missing trillion dollars, that is trillion with a T-R-I-L-L-I-O-N, and it is talking about the World Bank commitment to developing countries throughout the world to address climate change.

They have basically estimated that it will take a trillion dollars a year to address climate change issues in those undeveloped countries. The difficulty, of

course, is they have not identified the sources of that trillion dollars a year although they have some of it.

The reason that I label it both bad news and good news is the fact that it is necessary and the fact that they do not have it are both pieces of bad news. But it, I think, both helps to put our problem in context. We are dealing with a billion rather than a trillion. And I think also will help to create a background in which we can better educate people in the Bay Area of our needs to raise that money to adapt to rising sea levels in the Bay.

Ex Parte Communications. If any Commissioner wishes to report a communication they have had outside of public meetings about a matter on which we are going to sit in judgment or have a public hearing that you have not made in writing you may do so now; you do still have to make it in writing. Are there any Commissioners who wish to make an ex parte communication report?

I do not see any. Thank you.

That brings us to the report of the Executive Director.

6. Report of the Executive Director. Executive Director Goldzband reported:
Thank you, Chair Wasserman.

April 18 is a red-letter date on the American calendar. It was on this evening in 1775 that Paul Revere and William Dawes galloped out of Boston toward Lexington and Concord to warn Hancock, Adams, and the Minutemen that the British regulars were heading their way and were loaded for bear.

In a tremendous coincidence, it was exactly eight years later, on April 18, 1783, that General George Washington issued his General Orders that announced

that the “Cessation of Hostilities between the United States of America and the King of Great Britain” would be publicly proclaimed the next day.

I mention this because today you will learn how our planning team has started to gallop through the Bay Area’s nine counties to ask local elected officials to work closely with us as we develop the guidelines their jurisdictions will need to use to create their local rising sea level adaption plans.

And unlike George Washington who could not foresee when the Revolutionary War would end, we know that it will be no longer than eight months, not eight years, until the Commission will adopt those regulations later this year.

Good news on staffing. Unless we hear otherwise from you, we plan to transfer Rachel Cohen, who not only serves on the Enforcement team right now but is sitting somewhere behind me here in this weird Temazcal Room. We are going to transfer her to the Long-Range Planning Team as an environmental scientist.

Rachel is a Blue Hen, having earned her undergraduate degree in Energy and Environmental Policy from the University of Delaware. She was originally hired by BCDC as a secretary and supported our Sediment Team in a number of planning efforts. She was promoted to the Enforcement team in October 2022, and you will remember her from her presentation two weeks ago. Working with the Long-Range Planning Team, Rachel will be part of the group that is reviewing how the Bay Adapt Regional Shoreline Adaptation Plan Guidelines may lead to future amendments to the San Francisco Bay Plan, and the process by which subregional plans developed under SB 272 will be reviewed and approved by BCDC.

Also, on the screen today is Rose An who joined the BCDC Sediment Team last

month as a Sea Grant Fellow. There you go, she is waving at you. Rose is helping develop the Beneficial Reuse Roadmap and subsequent proposed Bay Plan Amendment, and is working to understand the outcomes of the sand mining studies.

Rose is a Lady Trojan, having earned her undergraduate and graduate degrees from the University of Southern California. Prior to starting with us, she completed an internship for the Sea Grant Research arm in which she worked at various outreach events to effectively communicate to the public the importance of Marine Protected Areas, coastal issues, and environmental justice. Prior to that, she interned for Los Angeles Mayor Karen Bass, performed research on red abalone, and conducted stakeholder outreach on oil well remediation and solid waste management on Catalina Island. We are thrilled to have her with us.

With regard to policy, you may remember that several years ago, BCDC approved the creation of the Wings Landing Educational Kayak Program, which was developed as a way to provide public access to the Wings Landing Tidal Habitat Restoration Project in the Suisun Marsh. We knew that creating a program that would create public access by putting kids in kayaks would be a grand experiment. It started in 2021.

We have received the good news that the program has been fully integrated into the summer school curriculum for Crystal Middle School as part of a multi-session, week-long Science Camp, and is expanding to include additional schools this summer. Each year has been met with excitement and overwhelming positive reviews by everyone, including the students.

The local Soroptimist Club is granting the program an additional \$20,000 to

keep it going. This is a great example of how public access can be developed not just on land but on the water and demonstrates that BCDC continues to need to be creative as we explore new ways of providing public access in light of rising sea levels.

Assistant Planning Director Dana Brechwald and I had a terrific discussion with members of the Solano County Board of Supervisors and the mayors of the cities of Solano County last week about SB 272 and the development of subregional adaptation plans.

I want to note this particularly because, and pay attention local elected officials, the supervisors and mayors seemed to agree that the best way for the County to move forward is to work together on a joint plan to cover the entire county shoreline. We do not know whether that will happen, or if it does whether other counties will take the same approach, hint, hint, but we could not help but be terribly impressed by the seriousness and insightfulness of the supervisors and mayors. We want to thank Commissioner Vasquez for his help in setting up the meeting.

And I will let you know now that next week we will have meetings with Marin County officials and the week after that we will be in Contra Costa with their local officials.

In what is likely the last time that I will need to mention the Oakland Athletics, the Alameda County Superior Court dismissed without prejudice the lawsuit filed by East Oakland Stadium Alliance against BCDC and the A's over the Commission's approval of the Howard Terminal Bay Plan Amendment almost two years ago.

We all know that the Athletics have more than just indicated their intent to abandon the ballpark and the City and the mixed-use development proposal, so all litigants stipulated to certain terms to dismiss the lawsuit.

That being said, staff will continue to apprise the Commission of any further issues of note surrounding the Bay Plan Amendment, relevant legislation including AB 1191, and the Oakland Athletics' miracle start to the season.

Finally, here is a notice for the BCDC Book Club. Our friend from UC Davis, Professor Mark Lubell, who sits on Bay Adapt's Advisory Group, and his former researcher, Francesca Pia Vantaggiato of King's College in London, have written a book specifically about the governance issues surrounding rising sea level policy in San Francisco Bay. Its title is "*Governing Sea Level Rise in a Polycentric System*" and it is available on Amazon. We look forward to Mark explaining the title, much less many of the book's graphics, in the near future.

With that, Chair Wasserman, I am happy to answer any questions.

No questions were posed to the Executive Director.

7. Consideration of Administrative Matters. Chair Wasserman stated there were no listings on administrative matters.

8. Public Hearing on 505 East Bayshore.

Item 8 was postponed.

9. Public Hearing on Enforcement Case ER2015.024.00 - City of San Rafael. Chair Wasserman stated: That brings us to Item 9, a public hearing and possible vote on the Enforcement Committee's recommendation to require statutory and permit

compliance at Starkweather Park in San Rafael Marin County, and payment of up to \$30,000 in administrative civil liability, to resolve BCDC Enforcement Case ER2015.024.00 against the owner of record, the city of San Rafael.

On March 7, 2024, after a duly noticed public hearing on this matter, the BCDC Enforcement Committee voted to recommend this enforcement recommendation to go to the full Commission for approval. The recommendation includes a proposed settlement agreement with the city of San Rafael that requires it to reopen a required public restroom at the park and pay an administrative civil penalty by no later than May 10, 2024.

Adrienne Klein of our Enforcement Team will present the item in just a few minutes.

First, I would like the representatives for the city of San Rafael if they are virtually present to identify themselves for the record.

Mr. MacLean identified himself: Hello, I am Connor MacLean, attorney for the city of San Rafael.

Chair Wasserman acknowledged: Thank you very much.

Ms. Guillen followed: My name is Fabiola Guillen, I am the Senior Project Manager for the Department of Public Works here in San Rafael.

Chair Wasserman continued: Thank you for being with us as well.

Ms. Guillen acknowledged: Thank you.

Chair Wasserman continued: BCDC enforcement staff will first present the case and the proposed settlement agreement for our consideration, after which time the respondent will be given an opportunity to comment.

After that presentation and comments, we will open the public comment period. Public comments will be limited to three minutes per person. After the public comment period has been closed, the floor will be opened to members of the Commission to ask follow-up questions of BCDC staff and the respondent and to deliberate on the matter.

All speakers must limit their presentation and comments to the evidence already made part of the record that has been published online with this meeting's agenda, and/or the policy implications of such evidence. We will not allow the presentation of any oral testimony or new evidence.

The public hearing is declared open.

Adrienne, will you please make the presentation.

Ms. Klein presented the following: The purpose of this formal enforcement proceeding is to resolve a single permit violation involving a closed public restroom at Starkweather Park on Francisco Boulevard in the city of San Rafael. The presentation will identify the site where the violation is occurring, briefly review the permit and enforcement history, summarize the terms of the settlement agreement that will resolve the violation, and conclude with the staff recommendation.

The next three slides identify Starkweather Park in the city of San Rafael near the western terminus of the Richmond-San Rafael Bridge in Marin County.

With this image showing a site overview with enough detail. This is zoomed in closer. Now there is enough detail for you to see the restroom building visible inside the red cloud bubble at the bottom left of the image in the parking lot area. Francisco Boulevard is below the bottom of the image and the Shoreline Trail

pictured adjacent to that restroom continues to the north and west above the top of the image. There is a beach pictured on the right.

This Google Earth image shows the view of the restroom looking north. The public shore parking required by the BCDC permit is located in the parking lot where the photo was taken. And you can see that Shoreline Trail behind and to the right of the restroom, beach is just off to the right.

This formal enforcement proceeding seeks to resolve a single violation, the failure, as has been noted, to maintain a public restroom in violation of Special Condition II.B.4 of a 1978 permit.

Now to the timeline. The 1978 permit authorizes a portion of two commercial buildings and fill placement for paved roads and parking in the Commission shoreline band jurisdiction. Special Condition II.B.3 of this permit requires, among other public access improvements, that the permittee provide a public restroom that shall be open to the public prior to the use of any commercial facility; and that commercial facility has been in use since at least 1987.

While the public restroom was constructed according to approved plans and opened to the public in September 1985, the City closed it approximately six months later in or around March 1986 and it has remained closed since that time.

Therefore, as noted in the previous slide, the City is in violation of the maintenance condition of its permit, which requires the City to maintain a permanent public restroom. And by its closure the City has failed to maintain the permanent public restroom.

Between 1986 and 2015, BCDC was unaware of the public restroom's closure.

Staff received no reports from the public nor did staff discover the violation. The building was a nondescript structure for many years, which made it difficult to identify the violation for anyone without knowledge, detailed knowledge of the permit's public access conditions.

In July 2015, the City submitted a permit amendment request in fact to remove the restroom from the permit requirements and this is how BCDC discovered the violation.

In October 2015, BCDC staff opened this enforcement case and notified Respondent of its permit violation.

In April of 2016, one year later, staff requested documentation from the City to support its position that to open the restroom would constitute a public safety hazard.

Between April and November 2016, the City did not provide that data to BCDC staff.

Also in November, BCDC issued a letter that commenced the accrual of standardized fines for the restroom closure violation, among others that have since been resolved.

In December of 2016, staff understanding the difficulty inherent in reopening this long-closed, unused structure to the public in a manner compliant with building requirements, agreed to allow the City to install a portable restroom and handwashing station at the site on a temporary basis in order to provide the basic service that the City had denied to the public for the past 30 years.

Staff did not contemplate at the time of this arrangement that the temporary

portable restroom would remain in place for more than seven years.

In January 2017, BCDC staff informed the City that with the installation of the portable restroom and handwashing station, staff had determined that the violation had been provisionally resolved, temporarily halting the standardized fine accrual through a specific date of June 30, 2017, by which time staff expected the permanent restroom to be opened to the public or standardized fines would recommence accruing. The City unfortunately did not open the restroom by the end of June.

So, in July, BCDC staff informed the City that as the restroom remained closed, the provisional resolved status of the case was being rescinded and that the standardized fines had as of that date accrued to over \$18,000, and would continue to accrue to the administrative maximum of \$30,000 until the violation had been resolved.

Staff informed the City that if its request to eliminate the restroom from the permit was not approved by the Commission, that staff may commence a formal enforcement proceeding.

In 2018 and '19, the City prepared and submitted restroom reconstruction plans to BCDC, which BCDC staff conditionally approved in December 2019. The approved plans were for a single, ADA-compliant, plumbed restroom with exterior lighting, and the enforcement analyst negotiated the inclusion of a drinking fountain and water bottle filling station built into the exterior of the structure in order to offset the loss of the second restroom that was part of the original structure.

For most of 2020 there was no contact between the City and BCDC due to COVID-19.

In November 2020, staff reinitiated contact with the City to request progress on the restroom reconstruction and reopening project.

In early 2021 the City informed BCDC that the restroom reconstruction had commenced; and later that it had been completed and had also passed plumbing and electrical inspections. The City stated that the restroom might be opened by the summer of 2021, but that PG&E would have to first turn on the power.

In March 2022, the City reported that PG&E had reported that it would take five to eight months to start work once a construction contract between the City and PG&E was paid for and in place. The City reported to BCDC that PG&E needed to drop a power line from a pole and run conductors and conduit from the pole to the restroom. The City also reported that it was working with San Rafael Sanitation District to obtain a sewer connection permit and with Marin Municipal Water District to obtain new water service.

In January 2023, the City reported that it had reinstalled the water service, rehabilitated the sewer lateral, replaced the sewer ejection pump, updated the electrical components and installed a meter pedestal and had bored a conduit from the PG&E service pole. They also stated that the City was still waiting on PG&E to provide electrical service, the last utility required for the restroom to be functional.

For the remainder of 2023 there was no contact between the BCDC and the City.

On January 30, 2024, BCDC commenced a formal enforcement proceeding to cause the restroom to be opened through issuance of a Violation Report and Complaint to cause resolution of the eight-year-long violation.

A week prior to issuance of the Violation Report and Complaint, City staff informed BCDC staff that the restroom reconstruction had occurred consistent with BCDC staff-approved restroom reconstruction plans and that PG&E had installed the power conduit to the restroom on a privately-owned parcel adjacent to the restroom and would not turn on the electric power service to the restroom building until the City presented PG&E with an easement from the owner of that privately-owned parcel.

During a telephone conversation at the end of February of this year, BCDC staff received the following further update: That the City had met with the owner of the privately-owned parcel who had agreed to enter into an easement with the City; that PG&E had agreed to accept a letter from the owner pending completion of the easement process to enable PG&E to turn on the power to the restroom; and that the City had obtained said letter from said private property owner and submitted it to PG&E; who based on the assurance it provided that an easement would be forthcoming, had scheduled an April 10 site visit to turn the power on to the restroom.

On March 4, counsel for the city of San Rafael and BCDC held a confidential settlement negotiation, which resulted in an agreement to settle this matter as follows.

The City has agreed to pay BCDC \$30,000 by May 10, unless it demonstrates that it has made available for use by the public the permanent restroom facilities and water fountain/water bottle filling station by April 27 and restored the site by removing the nearby temporary toilet and handwashing station and restoring some

landscaping behind the restroom by May 6. In that event, the settlement agreement would authorize the Executive Director to accept a payment of \$15,000 no later than May 10.

On March 27, the Enforcement Committee adopted the staff-recommended enforcement decision. And today the Enforcement Committee recommends that the full Commission adopt the proposed recommended Enforcement Decision, which includes a proposed Settlement Agreement to resolve Enforcement Case ER2015.024. If adopted, this case would be transferred from the Enforcement to the Compliance Unit for compliance monitoring.

That concludes the staff's presentation. Thank you.

Chair Wasserman acknowledged and asked: Thank you.

Do either or both of the representatives from San Rafael wish to address us?

Mr. MacLean spoke: Hi, Connor MacLean, attorney for San Rafael. Thank you, Adrienne, for your presentation. We have really enjoyed working with you on this and we have enjoyed working with other members of BCDC to put together this Settlement Agreement. I will have Fabiola explain a bit more of what is going on right now, but I wanted to update everyone about the progress on this bathroom.

Unfortunately, PG&E had told the City that it would come on April 10 to finish installing power. We were expecting that shortly thereafter the bathroom could be reopened so that we could meet the April 26 deadline for a \$15,000 reduction in fines.

It is pretty clear that the City is not going to meet that deadline thanks to PG&E's cancellation. We hope to meet the May 10 deadline for compliance to get

this bathroom opened.

But honestly, at this point I do not, I have never really trusted PG&E, I continue not to trust PG&E, and so we would like to ask for an extension. If you would be willing to grant an extension for the timeline for compliance for opening the bathroom, I think that that could benefit both BCDC and the City.

We understand the reasons for imposing the fines for the past violations. The bathroom was not open for all this time, that the public was harmed, we get that. But at this point, I do not think that imposing additional fines on the City benefits anyone. It is just taking funds from one public entity and giving it to another public entity and those are funds that could be used to actually open this bathroom.

I understand that there is interest in putting a fire under the City's feet to get this done. The fire is there. We are working on it. Fabiola has been diligently liaising with neighboring property owner, with PG&E, with BCDC to get this bathroom open.

Unfortunately, at this point the City finds its hands completely tied. We are completely beholden to PG&E at this point. We were promised that they would be here on April 10 and they then did not show. We are working with them to get them to come as soon as possible but there is really nothing that the City can do at this point.

And so, to impose additional fines if the bathroom were not opened by May 10 on the City seems a bit unnecessary given that the City is doing everything it can to get this bathroom open.

I am going to turn it over to Fabiola right now to explain a bit of the process of

how we got to where we are at right now. She has been with this process every step of the way and I think can explain a bit better some of the complications that happened with PG&E digging a ditch in the wrong place, making promises to the City to install service and then not following through, so I am going to turn it over to Fabiola.

Ms. Guillen addressed the Commission: Thank you, Connor. Hi, everyone. Fabiola Guillen from the city of San Rafael.

It has been an adventure. Thank you, Adrienne, for the presentation. There is so much detail there. Although it may appear otherwise, the City has been working really hard to try to get this opened, this restroom opened. It is not only for our community but also it is a project that has been lingering for so long that it is in everybody's best interest to get completed. So, I just want to put it out there that there is absolutely 100% commitment from the City to get this done.

But secondly, and what Connor mentioned, PG&E has put us in a very difficult position. We had an agreement with them. We had a commitment from them that they were going to install this power on April 10. And originally it was just with a promissory letter from the property owner, adjacent property owner, that they were giving us permission to install the power; and then later on that changed to requiring the formal easement. Which we produced in, I have to say, record time, and provided it to PG&E. And only on April 8 did they tell us that the easement had to be received earlier and so that they had bumped us off the schedule, basically, and we were never notified of this.

Our City Manager got involved and has contacted PG&E above my level and

director's level and they seem to have committed now to rescheduling our job coordinator for May 10 for installation of the power. I have received confirmation that that is going to happen, and the job may take a full week, intermittent. Different crews are going to come at different times, and they are going to install the power.

We on our end have made arrangements to fulfill the rest of the agreement, which is to remove the temporary toilet once the restroom is complete and restore the adjacent landscape so that we can open the permanent bathroom to the public as soon as possible, as soon as the power gets connected.

I also did a little investigation before the meeting, and we have issued the \$15,000 check to BCDC. On April 5 we issued this check to BCDC for the original \$15,000 amount. We will hopefully be ready. After this is all done, we will reopen the bathroom as soon as possible. Like Connor said, our level of confidence and trust in PG&E's commitment is limited.

Mr. MacLean continued: I will just add to what Fabiola said in case people are unaware of the background here. The reason that we needed to get an easement from the adjacent property owner is because, Fabiola you can step in and let me know the year in a second, but maybe a year ago or two years ago I believe PG&E had come and said that they would install power for this bathroom. They did so and then afterwards realized, oops, they installed it on the neighboring property owner's property and not the City's property. The City then had to ask PG&E to either redo it, which was going to cost a ton of money, or negotiate an easement with the neighboring property owner.

The neighboring property owner agreed that they would give the City an easement and that took some time to negotiate. But again, this delay stems in the first place from once again another mistake by PG&E.

I want to highlight that even a year or two years ago, the City was on track to get this bathroom opened and PG&E keeps making mistakes that prevent this bathroom from getting opened.

Mr. Scharff commented: I wanted to respond on behalf of staff to the request. The Commission really cannot give an extension on this. The Commission could send it back to the Enforcement Committee if they want, who could look at it. Staff can give an extension.

The agreement says that the Executive Director can modify the agreement and sign a modification. At this point, staff is considering it and would like the Commission to basically allow the Executive Director, you do not need to take a vote. That would be our preference, to modify it assuming the City is continuing to work in good faith and all of that.

We do not want to make the decision right now if we want to do that. So, if you do nothing and approve this, the Executive Director may very well grant an extension on this, given the circumstances.

Or the other choice you have is you could send it back to the Enforcement Committee.

But we would hope you would actually just approve it as is and then we will work with the city of San Rafael and possibly give them an extension depending on the circumstances.

Chair Wasserman acknowledged: Thank you, Greg.

Sierra, do we have any public comments?

(No members of the public addressed the Commission.)

Chair Wasserman continued: Then I would entertain a motion to close the public hearing.

MOTION: Commissioner Nelson moved to close the public hearing, seconded by Commissioner Gilmore. The motion carried with no abstentions or objections.

Chair Wasserman stated: Now it is time for questions and comments by Commissioners.

Commissioner Eklund commented: I have a question for the city of San Rafael. Connor, you mentioned in your presentation that PG&E did not show up and then later it was said due to a cancellation. Can you help me to understand which one was it. Did they cancel in advance? Can you help me understand that sequence of events?

Mr. MacLean called on Ms. Guillen: Yes. Fabiola is more familiar with this, so I am going to let her take this question.

Ms. Guillen replied: I guess we are all familiar with PG&E. They have several divisions. What appeared to have happened is the Land Development Department, who is in charge of the easements, had everything that they needed to release the project. However, somewhere on the construction side of things they did not get the easement in time, in their mind, to proceed with the work, so they basically removed the project from their schedule.

We did not know until April 8, two days before they were supposed to come

up, even though we did several follow-up emails and calls and we confirmed that we were on track. It was not until April 8 that we started hearing that was not going to happen and they needed confirmation from the construction department.

I would consider it both a cancellation and they basically took us off the schedule. It took a lot of a lot of communication with them to try to get that information out.

Commissioner Eklund continued: Okay. Then help me to understand this lack of an easement. The property that the bathroom is going to be on was actually not in an approved location by the city of San Rafael?

Ms. Guillen answered: The bathroom itself is on our property, it is on a City property parcel, and maybe the presentation that Adrienne had might have helped us understand. I do not know if you remember the picture that we took of the front of the building from the parking lot. Behind that parking lot is the street and that street is where the power is coming from. If you imagine a line directly from the street to the bathroom, that part, that section is a private right-of-way that is private property. And that is where PG&E ran the empty conduit without permission.

Commissioner Eklund acknowledged: Right. And had the city of San Rafael talked with the owner of that property and got their approval to actually place the power line through that area?

Ms. Guillen replied: Yes, so that is the easement that we procured. First, we thought that a simple letter would suffice and allow PG&E to do the work to conduct their installation of the meter. However, they changed their mind and they said, we need a formal easement which basically granted the City and PG&E the right to use

that land. And that is what the City did after negotiating with the property owner.

Commissioner Eklund acknowledged and asked: Okay, great, thank you.

Chair Wasserman, do you want me to make comments now or do you want me to wait until after all the questions are asked?

Chair Wasserman replied: No, go ahead and make your comments now, please.

Commissioner Eklund continued: Okay. I really feel that the BCDC or the Enforcement Committee should work with San Rafael and not necessarily give them the full penalty.

Obviously, for not doing it way back 20 years ago, the City cannot change that. But for the work that is occurring now it sounds like, and we the city of Novato has also had issues with PG&E. I think all cities and counties have actually had some issues with PG&E. It is very hard sometimes to get them committed and they do have high turnover.

So, I would really welcome and would encourage the Enforcement Committee and BCDC to give city of San Rafael a little bit more time with that additional penalties because obviously they are committed to this.

As a sister organization having issues with PG&E, I would feel for the city of Novato anyway, that we were being penalized for something that we did not have control over. So, that's my comments and I would like staff at some point to let me know what I need to do in order to follow up on this if necessary. That's my feeling. Thank you.

Commissioner Moulton-Peters was recognized: Very similar comments on my part. I want to thank the Enforcement Committee for bringing this to us and staff. I

think the City has made a good faith effort.

I think we are all familiar with the difficulty that PG&E has had in in scheduling service and actually hitting the schedule, whether it is equipment shortages or work priorities or the wildfire work that they prioritize.

I would like to also ask for consideration for San Rafael to be given some time to pull this together with PG&E and have a reduced fine still in effect. Thank you.

Commissioner Vasquez commented: I am going to take a different route; I have no sympathy at all. The public has gone without a bathroom for 38 years. I think there has been plenty of time to rectify it. For the last 8 years we have known that the restroom has been closed, 9 years at least. There has been plenty of time to get it done right.

If it is the fact that they put the conduit in the right place, I think the City had the power to simply condemn that piece of land and say this is where the easement is, and this is where it is going to stay. Certainly, it had power from 1978 to 1986 because it was functioning.

You know, somebody from the City used the word promise a couple of times and I think one of the other speakers used commitment. There was a promise of the public to have these functioning restrooms and that promise was made 46 years ago. I do not see where there should be any more leniency. Those are my comments.

Commissioner Addiego stated: I am feeling a little bit more generous today than Supervisor Vasquez. I think most of the local elected people that serve on this Commission could give you examples of where PG&E has delayed anything from much-needed traffic signals for safety and traffic flow to major developments worth

tens and tens of millions of dollars, so I am sympathetic to what San Rafael is facing.

I guess I am directing my comments to the Director because it sounds like, according to Mr. Scharff that he will be the determining body. So, that was for you, Larry.

Commissioner Showalter chimed in: I would just like to say I am sympathetic with San Rafael on the one hand, and on the other hand, if you have been having this problem for this many years why haven't you thought of an alternative? There are a lot of lights that go on batteries. As an engineer, there's other ways to do things.

This does not seem like it is a very remote place, but I know that there is other technology. I just want to say, in the future if we are having a problem like this let's ask people to think outside the box a little bit.

Chair Wasserman noted: I do not see any other Commissioners.

Connor, I am going to give you a moment to respond and then I am going to make a couple of comments.

Mr. MacLean replied: Hi, again, thank you all for your comments. I just wanted to point out I hear your concerns and desire to hold the City accountable for not having had the bathroom open in the past. I just want to highlight again, the City recognizes that the bathroom should have been open. Again, we are doing everything we can to get the bathroom open.

The City was composed, you know, 38 years ago, 37 years ago, 36 years ago, 20 years ago, 10 years ago, 5 years ago, of different people than it is composed of now, within city staff. Current city staff takes this very seriously and is working to get it open. I do not think it is fair or useful in any way to penalize the current

composition of the City for the past composition of the City.

And just to the point of Commissioner Vasquez. You wondered why the City would not just condemn the land where the conduit was mistakenly built. Condemnation is not as easy as that. Were it, the City may have considered that option. But that is, I think, not even on the table. We will appreciate your leniency if that is possible and we look forward to continuing to work with you.

Commissioner Eklund offered additional comments: Thank you very much for allowing me a second bite at the apple here. Because I have not had too much experience with this, can you tell me what the process is? Is it appropriate for us to have some offline discussions with the Executive Director?

Mr. Scharff replied: No. Actually, let me just tell you the process. The process is that as staff we are listening to what the Commissioners have said and taken their comments into consideration. There are two choices. You can either send it back to the Enforcement Committee, which I do not think you should do. That would not be my recommendation. My recommendation is to approve what you have before you. The Executive Director has heard everything you have said. San Rafael and we will have discussions and we may or may not grant an extension.

And it is not just granting an extension, it is for how long an extension will be granted, it is what milestones need to occur. There is a whole procedure here so that we make sure that, frankly, their feet are to the fire. And that, I do not disagree that PG&E has caused the problem and I think San Rafael has been working in good faith and we are definitely taking that into consideration. But that is really what the process is.

Commissioner Eklund asked: So then do we have the ability as a Commissioner to talk with the Executive Director on whether or not the staff is going to give them an extension. Whether or not we have an opportunity to bring it back to the Commission.

Mr. Scharff answered: No.

Chair Wasserman noted: Those are different questions, let's answer them separately. Go ahead, Greg.

Mr. Scharff explained: So, the answer is, I cannot stop you from sending emails, but the answer is no, it is not really appropriate in an enforcement matter to be weighing in the Executive Director.

Now is your opportunity. You weighed in publicly. I took your comment as work with the city of San Rafael, it is not their fault. I heard you. I heard Commissioner Vasquez say the opposite. I heard Commissioner Moulton Peters, say work with them. We are hearing what you are saying, and I think it is really up to the Executive Director.

But I can tell you what our process will be. It will be to talk to the city of San Rafael and to understand the situation and to take into account Commissioner comments, and then figure out how best to move forward.

Commissioner Eklund continued: Okay, great. Thank you very much for explaining that. I just hope that the Executive Director will take what city of San Rafael said into consideration and try to work with them to urge PG&E to follow through on their commitments when to show up to help with the installation of the electrical connection. Anyway, thank you very much.

Chair Wasserman added: I would support from my own perspective the position that our General Counsel has proposed. I am sympathetic, as all of you are, to delays by PG&E that are outside the control of the city of San Rafael. But I think given our limited choices, which are to totally reject this, or to return it to Enforcement, or to approve it with the understanding that the Executive Director does have the power to grant extensions and to determine the timing and conditions of those, that that would be the appropriate matter. So, I would entertain a motion on the matter.

MOTION: Commissioner Gilmore moved that the Commission approve the Enforcement Committee's recommended enforcement decision, including the proposed settlement agreement with the city of San Rafael, seconded by Commissioner Moulton-Peters.

VOTE: The motion carried with a vote of 19-0-0 with Commissioners Addiego, Ahn, Ambuehl, Burt, Eklund, Gilmore, Gunther, Hasz, Kimball, Kishimoto, Moulton-Peters, Nelson, Pemberton, Peskin, Pine, Ramos, Showalter, Vasquez and Chair Wasserman voting, "YES", no "NO" votes, and no "ABSTAIN" votes.

Chair Wasserman announced: The motion passes. I think that both the city of San Rafael and the Executive Director and staff have clearly heard the concerns of the Commissioners and will act accordingly.

10. Briefing on Regional Shoreline Adaptation Plan - Subregional Adaptation Plans. Chair Wasserman stated: That brings us to Item 10, a briefing on our progress to create a Regional Shoreline Adaptation Plan. Developing guidelines that local jurisdictions will use as they develop their subregional adaptation required by

SB 272's Regional Shoreline Adaptation Plan mandate.

These include a list of what elements those plans should contain and how they should be developed. Dana Brechwald, BCDC's Assistant Planning Director for Climate Change will provide the briefing after a brief introduction from our Executive Director.

Executive Director Goldzband spoke: Thank you, Chair Wasserman. I have not told Dana I am going to do this, but I wanted to do two things.

Number one, I want to give Dana props in front of the Commission for what she did with the representatives from Solano County last Thursday night when she gave sort of the same presentation.

I want to draw all of your attention as local public officials to this presentation because this is what you all are going to experience after December. When these guidelines are ultimately published it is going to be your responsibility to work through them. And we need you to think about them now, before they get published, much less before they are really drafted in anything other than wet cement. That is why we really want you to pay attention to this presentation. And as we go around the rest of the counties, to be with us so that you understand what it is we are trying to do, and more important, we get your help to do it right. So, with that, go ahead, Dana.

Assistant Planning Director Brechwald addressed the Commission: Good afternoon. It is wonderful to see you all, Commissioners. I am going to talk to you a little bit about our draft concept for subregional shoreline adaptation plans as identified and mandated by SB 272.

You have seen this slide before, and I know you are familiar with the basic structure of SB 272. But just as a reminder, this bill supports the regional preparation that we know we need by requiring local jurisdictions to develop subregional resiliency plans, and for BCDC to develop the guidelines that the plans must follow.

The bill also encourages consistency and coordination. That is what our Regional Shoreline Adaptation Plan is really seeking to provide around the region. The bill also adds that BCDC is now required to review and approve or deny subregional plans based on consistency with these guidelines.

Lastly, it adds an important carrot that projects within the approved plans are prioritized for state funding, which supports our objective of supporting strategic implementation of projects around the region.

The bill does contain some minimum requirements, which are fairly basic. Use of best available science, creation of a local vulnerability assessment that includes efforts to ensure equity for at-risk communities, developing sea level rise adaptation strategies in recommended projects, identifying lead planning and implementation agencies, a timeline for updates as needed, and an economic impact analysis for critical public infrastructure.

Obviously, this does not say much about what the Plan actually is or what each of these elements should contain. So that is the basis for my presentation today. I will share with you our current thinking on what we are calling plan requirements. As Larry mentioned, the cement is still very wet, so we are hoping to hear your feedback today.

As you know, we have been working on developing the Regional Shoreline Adaptation Plan Guidelines since before the bill was even signed. We worked with Senator Laird to ensure that the bill language was aligned with our vision for the Regional Shoreline Adaptation Plan and we are on track to complete the guidelines by December per the bill's language.

And I will also note that funding is already available for these plans. This is not an unfunded mandate for jurisdictions, but there is grant funding for developing shoreline adaptation plans available through the Ocean Protection Council through the SB 1 Grant Program. Other pots at the state level could be applied to this purpose as well.

We have been working with the Ocean Protection Council. We worked with them on the grant criteria for the SB 1 grants and staff is reviewing proposals from the Bay Area for alignment. Once our guidelines are complete, we will continue to work with OPC to update their grant guidance for future rounds of this grant, starting in 2025.

I will also note that while there is a lot of money available right now for adaptation, given our current state budget situation we do not know how long this will last. So, it is in jurisdictions best interest to get these plans funded and developed soon.

Our first step towards establishing a regional process for adaptation planning and fulfilling SB 272 was to develop our One Bay Vision to drive the scope and ambition of regional guidelines and local plans. We shared this with you in detail in February.

The One Bay Vision establishes our ideal end-state if adaptation is successful in each of these eight topic areas you see here. In addition to popups around the region, this vision was developed through an online survey and engagement with our Advisory Group which consists of 40 subject-matter experts in various fields related to the topics you see here.

SB 272 requires BCDC to develop guidelines for subregional shoreline resiliency plans, but that is really just the first phase for getting plans in place around the Bay.

Phase one, which will be completed by December, includes our One Bay Vision that I just spoke of. The Vision will first and foremost inform how local plan guidelines are developed. These guidelines will lay out consistent regional standards for how local jurisdictions can create subregional plans and develop adaptation strategies that meet minimum criteria to advance the region's priorities and outcomes of the One Bay Vision.

The Vision will also inform how we select the region's strategic priorities. This component will identify key priorities for the region and identify where certain types of adaptation are most appropriate and beneficial locally to advance our goals for the region. These are based in products like our ART Bay Area, which was published in 2020, which lays out a comprehensive vulnerability picture for the region's systems.

Our next phase is supporting local jurisdictions to create these subregional adaptation plans, which will include a variety of elements which I will discuss today, such as vulnerability assessments that were identified in SB 272. These will

ultimately identify adaptation projects and land use changes with implementation strategies that will help get projects on the ground.

Lastly, the last component that we are developing that you can see up here in the corner here is our online mapping platform, which underlies and supports both of these efforts. It is a data and mapping platform that is designed to provide key information to local governments to support the development of subregional adaptation plans.

Right now, as we develop an initial draft of the guidelines to specify what goes into subregional shoreline plans, we also have to decide fairly quickly what these plans should look like, what they should include, what is the scale of subregion and who leads?

What should these plans include to maximize effectiveness while limiting while recognizing the limited capacity of local jurisdictions to do these plans at the local and county scale?

And lastly, how are these plans approved, codified and translated into the real world?

We have a concept that we have developed that I am going to talk about with you today, but this is an important time to pause and say that we are really road-testing these concepts, both through this Commission briefing today, with the meetings that we are having with the counties that Larry has mentioned, and we have also been meeting with our Advisory Group and various focus groups to vet this material as well.

It is really important for us to test-drive these concepts with the audiences

who will be making the decisions about organizing and developing these plans such as you, local elected officials, local planners, and other local staff.

Working with our stakeholders, here are the guiding principles that we are bearing in mind as we develop our plan requirements. This concept that I am about to share with you has been developed collaboratively, starting with a research phase to look at various plan models throughout the region and the state, working with a subcommittee of our Advisory Group and holding focus groups with local and county planners, engineering and planning consultants, and special districts.

We want to make sure that the plans that we are developing through these guidelines are flexible, aligned, right-size, build on the existing efforts at local jurisdictions, and are impactful, they actually have meaning in the real world.

The foundation for subregional plans is the scale at which they should occur. What we are proposing is that plans happen at both the county scale and the local scale to ensure that we are covering all portions of the Bay shoreline.

As a reminder, our plan only covers local governments within BCDC's jurisdiction, while the Coastal Commission's LCP process is currently being amended to enact SB 272 on the outer coast.

We have learned by talking with cities and counties that every situation is different, and we need to account for that as we move forward. We anticipate working closely with cities and counties to identify the best scales and combinations of jurisdictions to do these plans.

Our county plans are intended to cover unincorporated parts of the county; and we also believe that counties should play a lead role in coordinating all the local

plans within the county.

At the local level, jurisdictions may either choose to do a single jurisdiction local plan or participate in a multi-jurisdictional local plan. Single plans may be suited for large or high-capacity jurisdictions or those that already have an adaptation plan in place, while multi-jurisdictional local plans may be organized around existing relationships, geographic or landscape features such as an operational landscape unit or a watershed, or where small jurisdictions with limited capacity can be expanded through partnerships.

We are also open to any combination of cities and counties or any combination of cities. For example, in a county with a handful of jurisdictions along the Bay shoreline, the county and cities may want to partner together to submit one combined plan, such as what we heard might be the preference in Solano County last week.

Staff is currently working to develop the content for the guidelines but here is an initial outline of two major sections. We want you to take a look at this and think about whether these are the appropriate elements that should be in these plans.

Our goal here is to keep this document concise and effective without being overly complicated or prescriptive. The focus here is on the guidelines for what should be included in each plan element, that is the column on the left, this is what should be in those plans. And then the minimum standards and considerations for how to fulfill these guidelines and that is the column on the right.

What we are proposing here is that each subregional shoreline adaptation plan should contain basic planning information, assessment of existing conditions, the

vulnerability assessment as aligned in SB 272, a section that outlines adaptation strategies and pathways for short-, medium- and long-term for all sections of vulnerable shoreline, a short-term project list, a land use plan that outlines land use changes that need to happen in order to enact the shoreline changes, and then an implementation plan that outlines how all of these adaptation strategies will be enacted over time.

We also are coming up with minimum standards around equitable engagement and participation, what time horizons people should be planning for, what are the flood hazards that we think everyone should be planning for, what are the minimum categories that people should be assessing in their vulnerability assessment, and most importantly, what are the adaptation strategy standards. It looks like a tiny little line on the slide here, but that is actually several pages of what we believe are best practices for actually developing adaptation strategies, such as looking at nature-based solutions. How do you consider what adaptation strategies should go where given your vulnerability, and various other conditions.

One important thing to note is that while plans may include multiple jurisdictions within a single plan, each jurisdiction must meet all the guidelines in some way, shape, or fashion, either on their own or in partnership with other jurisdictions.

I also really want to note here that we are definitely anticipating allowing content that has already been developed in other plans to be used or incorporated by reference in these plans, especially in local hazard mitigation plans, safety elements, and existing climate action plans or adaptation plans. We recognize there's a lot of

very similar content that jurisdictions may have already developed. We would like to account for that as much as possible.

This slide talks about the process for how we will submit and approve these plans. We want you to think here about how might this process actually play out in the real world? Easy to look at it on a timeline. But how would this actually work?

Once plans have been developed, counties and local jurisdictions should submit their plans at the same time. Plans will be reviewed by BCDC, both separately and together. Together to ensure that they are coordinated within a county, but separately to ensure that each plan is reviewed for its own merits and that each plan meets all the minimum requirements. BCDC will provide conditional approval to plans separately so that if one plan does not meet requirements, but others do, they will not be slowed down for approval. After conditional approval plans, should be adopted locally by county boards or local city councils, and each participating jurisdiction must adopt their plan separately. Once approvals are completed, they are submitted to BCDC, and final approval occurs when all jurisdictions within a county submit proof of local approval to BCDC.

We also believe that it is fundamental that the plan approved by BCDC to provide resilience for the shoreline of the whole county is codified into all the appropriate local plan and policy documents. We will be developing guidelines on where certain key strategies for implementing adaptation should be considered for integration into things like zoning ordinances, specific plans, capital improvement plans, and how considerations for how to update general plan elements like housing elements to reflect resilience policy changes.

This is the timeline that will get us to Commission approval of the guidelines by December of this year. We are here on the left in mid-April. We are preparing to share our first draft of the guidelines that we are calling the Committee Draft that will be reviewed by our Advisory Group and that we will be using as the basis for content at our CBO workshops, which I will talk about in the next slide.

After incorporating input from those groups, we will create a second draft for another round of review by our internal stakeholders and this will hopefully correspond with a public workshop. We will incorporate any changes from that into a public draft to be released in early September, in alignment with a Commission briefing, which will kick off our public comment period. That will close with a Commission hearing in early November. The vote is currently anticipated for early December.

I also want to note here, there is a line for our Electeds Road Show. We have already done two of those events and we have several more scheduled. We will be meeting with our Local Electeds Task Force on May 1, and we plan on meeting with them again over the summer.

We met with our Rising Sea Level Commissioner Working Group just a few weeks ago and plan on meeting with them again several times before Commission adoption.

The last thing I just want to mention here is our next major outreach, which is our local workshops in partnership with community-based organizations in May and June. These will be happening in five locations around the Bay and being cohosted by our community-based organization partners.

The goal of these workshops is really threefold. We want to make sure that the regional guidelines work for local governments and provide the guidance and direction necessary to plan and implement adaptation effectively. We want to test out guidelines in specific locations.

We want to bring people together, local community members, governments and stakeholders, to help facilitate and kickstart the collaborative conversations that are going to need to continue to happen after the guidelines are done and once the planning begins.

Lastly, we want to continue to build and support CBOs to lead adaptation efforts in their own communities. The partnerships we are offering are paid partnerships and our hope is that by co-developing the workshops with our community-based organizations, they can be set up to play a larger role in the actual development of the adaptation plans in the future.

All Commissioners with a workshop in your community will receive invitations to these workshops in the upcoming weeks. Invitations have not begun going out yet, so you have not missed anything. But our first workshop is currently planned for May 16 in partnership with Sustainable Solano in Suisun City.

I will pause there and turn it back to Chair Wasserman for discussion.

Chair Wasserman continued: Thank you very much. With the presentation complete, do we have comments from the public, Sierra?

Carin High spoke: Good afternoon. Thank you. This is Carin High, Citizens Committee to Complete the Refuge. I would like to begin by expressing my thanks to Dana and Jackie and the rest of the staff and to the BCDC Sea Level Rise Working

Group for all the efforts they have put into this. RSAP is definitely an extremely complex process, and we recognize that there are many voices that must be considered and in a really short period of time.

We deeply appreciate the manner in which staff have incorporated the importance and value of the Bay's ecosystem into the vision statement.

We recently expressed to staff our concern regarding a previous version of the outline provided on Slide 10. Our concern was that putting nature first and equity should be conveyed in the higher-level headlines as well as in the detailed language that will follow.

For example, headings regarding the need to put nature first and equity could be incorporated into the higher-level headings of the outline that discuss the plan element guidelines and the minimum standards and considerations. And Dana, in fact, just referenced the use of nature-based solutions under a heading of adaptation strategies and pathways. Thank you for that, Dana.

We understand the requirement to put nature first will be incorporated into the details developed for each of the outline sections. However, the only place nature occurs in the draft outline headings currently is under the One Bay Vision section. Our concern is that while we totally support the vision that has been stated, visions are not always reflected on what actually happens on the ground.

As just one recent example of why we think nature and equity need to be more prominent, CCCR recently received and reviewed and submitted comments regarding the Redwood City Sea Level Rise Vulnerability Assessment, which was good, a good document. But while the value of tidal wetlands was mentioned in the document,

discussion of the need to protect these habitats was largely absent, as was any discussion of the use of natural infrastructure, or nature-based solutions.

And of course, we raised these issues in our comment letter. This underscores the need to elevate the issues of putting nature first and equity into every aspect of the draft outline and guidelines as possible.

Thank you so much for the opportunity to provide comments and we look forward to continuing working with staff.

Arthur Feinstein addressed the Commission: Hi, Chair Wasserman and Commissioners. Arthur Feinstein, I am Chair of the Sierra Club's Sea Level Rise Committee for San Francisco Bay. I second everything that Carin said.

And so, I just don't repeat I just want to recall to all of you that in SB 272 one of the requirements is that the guidelines reflect and implement the principles found in the Bay Adapt process that you adopted a year or more ago. And the second bullet in those principles of Bay Adapt is put nature first.

And so, it is not just a nice thing, it is actually a requirement that put nature first be put first whenever possible, as the rest of the language goes.

And as Carin says, unless that is emphasized consistently throughout the guidelines, it is really quite possible for communities to sort of ignore that because most communities, most planners I believe, most people think of the shoreline and sea level rise and flooding as, let's put up a wall because that's what one does. Foster City, you know, a wall.

And so, it is an educational process. And so just putting it down at the bottom of oh, one of the adaptation strategies is put nature first. Yes, but maybe no. But if

it is right at the top, more than once in the headings of what you need to do, then it becomes clearer to the cities and the preparers of these plans that they actually have to educate themselves, learn what it means to do nature-based solutions, that they actually exist, and put them into their planning.

And we do thank staff very much for being very responsive to all of these thoughts, but we just feel we have to keep reminding it because this is the one shot to save San Francisco Bay's health.

And another reminder, 78 percent or more of the state's entire tidal wetlands are found in San Francisco Bay. A large percentage of them will drown under sea level rise. And I hope you all appreciate just how important tidal marshes are to the health of our aquatic environment as well as our own environment in our own lives.

So, we do not want to lose those. And one of the only ways we are going to have to make sure that we continue to have tidal marshes and a healthy ecosystem is if when we adapt our shorelines, we remember to put nature first.

Okay, thanks very much and I look forward to working with all of you and hope we come to a very happy solution and that the Bay survives into 2100 and beyond. Thanks so much.

Gita Dev spoke: Thank you. Is it possible to put up the slide that has the draft guidelines of the key elements? Because it is quite, it has got a lot of information on it. Thank you so much. Appreciate it.

Good afternoon, all. I am Gita Dev, I am with the Sierra Club. At the risk of sounding like we are all saying the same thing, I want to endorse what Carin High of the Citizens Committee to Complete the Refuge and Arthur Feinstein have just said.

I would like to put a slightly different slant on it. I want to acknowledge that we really appreciated staff having listened to our comments so far. In this case we have this particular request. Acknowledge it is a tough task to codify the vision and to get our goals on paper. But I work at Sierra Club, I work very closely with city councils, speak with developers. I am an architect, and I am accustomed to responding to RFPs and I can tell you how these projects actually work and that is why the Redwood City Project came out the way it did.

The capital improvement project's staff are public works staff and they are mostly engineers. The consultants who they hire, the RFPs are responded to by our PR firm, our PR staff. They look only at the outline. They do not look much further. They are extremely time constrained. So, it is really important to get it in the plan element guidelines and particularly in the minimum standards. Because if it is not there, they may not actually put in a fee for that. They may not have subconsultants that respond to that. These are the reasons why we have got to understand how projects actually work.

The Redwood City Project did have element A, B, C, and D. It went through the very good process of the existing conditions. The vulnerability assessment, as Carin High pointed out, did not include anything offshore from their shoreline except to just acknowledge they exist. It did not have any discussion about them. And the adaptation strategies, unfortunately, were purely engineering. They were walls and levees and also storm water pumps and piping sizes.

In talking to them yesterday, I met with them yesterday, they said, you know, we are the engineers. That is the reason I would ask you to bring this into the

outline. Thank you very much.

Ms. Peterson stated: There are no more hands raised, Chair Wasserman.

Chair Wasserman acknowledged: Thank you very much.

Commissioner Eklund was recognized: Great presentation. Reminds me so much of working for EPA where we did this for state agencies.

Anyway, so a question first on the local workshops. I think that it would be helpful if staff would contact the BCDC representatives for that particular county and talk with us about our availability. Because I think that this is going to be really important to make sure that those of us who serve on BCDC be there so that we can hear some of the concerns or comments of the folks that are at that workshop. That's the first one. I know that May 16 in Solano. Is that is that going to be also through Zoom as well or is it just going to be in-person?

Ms. Brechwald replied: I believe that one will be in-person.

Commissioner Eklund asked: Will it be Zoom as well or not?

Ms. Brechwald answered: I do not know the answer to that right now.

Commissioner Eklund continued: If staff could let us know that would be great. The other question I have is that with SB 272, was there any funding designated for local government cities and counties to help not only develop the plans but also to codify the local plans that are developed into the zoning and housing elements, general plans and all those other documents that we have? Is there any funding that is going to be given to each of the cities and the counties to implement SB 272?

Ms. Brechwald replied: I think Justine Kimball from OPC is online and can

maybe answer that question better than me about the suitability of SB 1 grant funds for that. Sorry just to put you on the spot, Justine.

Commissioner Kimball commented: Yes, no worries. I have a staff that is our SB 1 lead so I might have to get back to you on the specifics. Our funding is specifically towards development and the steps along the way, including vulnerability assessment, capacity building, visioning, to get to a sea level rise adaptation plan that can be a subregional plan. I do not know about the piece of like integrating it. I did not quite get that, like integrating it into the other plans.

Commissioner Eklund noted: But, Dr. Kimball, in order to make this enforceable, cities and counties need to put it into their regulatory documents. I will talk it as a state or local, or state or federal. They have to put it into their regulatory requirements in order to be able to enforce it.

And so, for an example, some of the adaptation strategies would obviously have to be encoded into the housing element or even in the general plan and then we have to develop enforcement mechanisms. That takes funding to do that, and cities and counties do not have enough money to implement, let alone yet another state law and put it into our regulatory requirements.

I guess I need to get some feedback as to what funding is going to be available for all. And this is statewide so all this. I do not know how many cities there are along coastal zones or waters of the state of California, but cities and counties would need direct funding from SB 272 in order to implement some of the requirements. Maybe we can have that discussion a little bit later. Or if BCDC staff know the answer to that question that would be helpful. I have other questions as well.

Commissioner Kimball stated: I can definitely check back on the OPC side of things. Again, the language for SB 1 in its implementing is very specific to sea level rise adaptation plans. I can see about the inclusion integration into other plans and how that would fit into our funding eligibility and get back to Dana with an answer or directly to you.

Commissioner Eklund emphasized: But Dr. Kimball, you do not have the regulatory authority to change our zoning standards, for an example. The cities and the counties would have to do that.

Commissioner Kimball replied: I thought you were asking about funding for the work.

Commissioner Eklund continued: Funding for cities and counties to do the actual implementation of the standards, absolutely.

Commissioner Kimball explained: Yes, our funding goes directly to cities and counties, those are the eligible grantees. I just need to check on that question about how far the funding would go.

Commissioner Eklund suggested: Maybe we can have an offline discussion too to get a little bit more detail. Because I have done this at the federal and the state level and so I definitely have a real good understanding of the staff implications.

For a poor property tax city like the city of Novato there is no way on this earth we would be ever able to change our regulatory documents without funding.

The other question is that Novato already has, and I think San Rafael does too to some degree, or other cities around the Bay. We already have existing housing that is over the Bay that is in the regulatory jurisdiction of BCDC and others.

These houses are owned by individuals. They actually own, I think, the airspace above the water, I am not exactly sure what their deed looks like. So, how is the local jurisdiction expected to develop requirements when we may not have the legal authority to remove some of those homes?

We are going to have to have some conversation about how do we deal with some of those that are already on the water, or over the water or within the regulatory jurisdiction of BCDC and or the state or federal agencies? Can you help me to understand how that would be approached?

Ms. Brechwald answered: I cannot say specifically how we would approach that particular situation. We are trying to address as many situations as possible in the guidelines.

As you all know, the Bay Area is vast and the types of manifestations of development along the shoreline and the issues and the priorities of each individual community. But I do anticipate that we will be working closely with cities and counties.

In fact, we have an RFP out right now to help us develop a technical assistance program starting in 2025. In most cases I believe we will work with cities and counties to understand how the guidelines apply in their particular situation. So, if that is the case in Marin or in Novato or anywhere along the shoreline, we would welcome a one-on-one conversation about that.

Commissioner Eklund asked: How do we do that? How do we initiate and say let's have some discussion, not only with the staff but also the elected officials too so that we can have a better understanding of what the implications are politically as

well as legally.

Chair Wasserman interjected: I think these are important questions, but we are also getting into a level of process that I think is beyond the level of this presentation.

And certainly, with our workshops and the local government officials we are doing some of that, which is not to say enough, so I think we will take those questions and issues into our staff's planning and into the next presentations to the Commission.

Commissioner Eklund acknowledged: Thank you, Chair Wasserman. I think it would be helpful if I could have some more discussions with staff on this issue so that I can have a better understanding about it so I can better communicate it. I am probably one of the rare, elected officials that has worked for over 40 years for regulatory agencies involving these issues. Thank you very much for answering my questions and I look forward to getting more engaged in this process. Thank you.

Commissioner Showalter commented: I have similar things from the view of somebody who has been involved in flood protection for quite a long time too.

In Santa Clara County we are blessed by being by old salt ponds that we can convert to marshes, and we have been working on this for quite a while. Most of us know this as the South Bay Salt Pond Project, which was really started as a habitat project. All the engineers involved knew it was also just dandy sea level rise protection, but that was not something that resounded with our public at the time, so we did not talk about it very much. As time has evolved, we continue on the South Bay salt pond restoration effort and we talk more about how indeed it is also

really good for sea level rise.

But what I am getting to is, in the South Bay in Santa Clara County, the county, in a sense, is not really the lead in this; the lead is really the Coastal Conservancy and the Santa Clara Valley Water District. It sounds like when you talk about this, Dana, that when you talk about county, I do not know if you actually mean the formal county or what is appropriate in that general area.

I just wanted to bring up that it may vary who are the really appropriate stakeholders from place to place and we just want to make sure that whoever they are, are the ones that are brought to the table. I do not honestly know what they are in other localities, but I do know in Santa Clara County if we do not have the Coastal Conservancy and Santa Clara Valley Water District taking part in this then we are not going to have all the stakeholders that we need to. I hope I will be able to set up a meeting with you and Larry in the not-too-distant future to talk about this.

Then I would also just like to say that I really do think it is very important to give credence to the plans that exist and that are moving forward and to kind of fill the holes that have not been made in them.

I know, for instance, Mountain View has a plan. We passed it in 2012 and we have updated it a couple of times. It includes 14 projects. We are actually implementing it as we speak.

But one of the things that was not part of it was really an explicit conversation about equity so that would be something that we would need to include. And I am sure that if you look around at many of the other plans that were put together, there are pieces that are just not there that we need to bring up.

I think that in lots of cases this is going to be a bit of putting together a beautiful patchwork quilt. We all have different patches finished and then we have some new ones that we have to construct before we can put it all together.

But I think we want to be really cognizant of using good existing work that that we have, and using the goodwill that has been built up to develop these and just kind of moving, particularly since we have to move quickly. We do not want to be reinventing the wheel and replace things we have already done. So that i's all I want to say. I am just delighted to see this, and I hope that I can serve as a resource for Santa Clara County.

Mr. Goldbeck chimed in: I wanted to clarify a point for the Commissioner. The law is very clear in who has to prepare a plan and it is the local governments that are on the Bay shoreline, so that is the cities and counties. It does not include special districts.

That being said, everything you said is very important in terms of special districts like the Valley Water and other major landholders and state agencies like Caltrans, and so they should be involved. But the folks who have to prepare and submit the plans are the counties and the cities. Just wanted to make sure everybody understood that.

Commissioner Showalter asked: Steve, along those lines, is it the shoreline cities? It is the shoreline cities, right? It is not necessarily the counties.

Mr. Goldbeck replied: Correct. It is the county, sorry. The counties are on the shoreline so it is the counties and the cities. They all have to prepare and submit a plan. They can do them collaboratively.

Commissioner Pemberton commented: I just wanted to thank staff for the presentation. Really excited to have this information and see this progress and I think the timeline looks great. I think that the guiding principles look really good. One question is whether there will be collaboration with the State Lands Commission to factor in or address the public trust?

Ms. Fain fielded this question: Yes, absolutely. We love working with the State Lands Commission. We work together through the, there is a statewide body that OPC convenes, a statewide Sea Level Rise Coordination Group that we have already been presenting to which the State Lands Commission participates in.

I think another really exciting way that we are going to be hopefully coordinating even more is through a study that we are just starting to develop around public trust needs for the Bay and sea level rise, that we are scoping out right now. So, I think that is another level in which our agencies can work together even more.

Commissioner Nelson chimed in: A question for staff. First, I am really excited that we are at this point in the process. It is really encouraging, and I really liked the outline of the guidelines. But I do have a question to follow up the testimony we heard from the Citizens Committee and others. And I am hoping staff can help me. I am trying to figure out if there is a disagreement between the Citizens Committee and staff in terms of what is in these documents or if that is just input on the merits?

The Commission is very supportive of nature-based solutions, I think we absolutely want to encourage them. We have heard this input a number of times and I am hoping staff can help me understand if there is a disagreement here or if that is

input the Commission staff is planning to incorporate in these documents as they move forward and how you are thinking about that?

Ms. Brechwald stated: I hope that they will agree, Carin and Arthur and Gita will agree that there is not necessarily a disagreement. We have incorporated nature-based solutions and an approach to putting nature first really throughout every component of the plan. The point that they have been communicating to us recently is that it needs to be elevated to the level of being visible in an outline.

We are not ignoring that information. For version-control issues we are keeping versions consistent until we incorporate a lot of feedback at once. We are also working with all three of those individuals on our advisory groups and various leadership groups so there are plenty of opportunities for us to work together to come up with a solution that is mutually acceptable.

Commissioner Nelson further emphasized: We obviously want to highlight those nature-based solutions. But I will not offer my ill-informed thoughts about how best to do that. Let staff keep working with those members of the public. Thank you.

Commissioner John-Baptiste was recognized: Again, kudos to staff on the work on this. I share the enthusiasm of my fellow Commissioners.

I did have a question around how you are planning to incorporate OLUs (operational landscape units) into the subregional plans. It seems to me like you sort of had a potential fork in the road around organizing subregional plans according to jurisdictional lines or organizing them around OLUs.

I can understand given the way that we are set up as a region why you might

go in the jurisdictional direction, but going in that direction then requires some kind of backstop, at least in my estimation, to ensure that we are not missing the lens of OLU. And it also, I think, creates some missed opportunity to connect jurisdictions that share OLU space but may not be connected either through county or through other forms of relationship.

To me, my interpretation of this is that there is more responsibility that then it gets placed on BCDC as the ones holding the point of view of the big picture.

I do not know if this is consistent with how you have thought about it, but I also am wondering if there is perhaps another level of detail below what you have presented today that speaks a little more directly to how you are incorporating that. If you could share what you can at this point, I would appreciate it.

Ms. Brechwald replied: Yes, we have certainly thought about the benefit of looking at an operational landscape unit as a form of analysis and for developing solutions. That is why we are offering a multi-jurisdictional plan option. It will provide some basic analysis that shows where operational landscape units can bring together multiple jurisdictions that might be particularly suited to doing a multi-jurisdictional plan. Those plans can cross county boundaries as well.

We did choose city and county boundaries because that is where land use planning takes place, and it can get a little bit messy when you are going outside of those jurisdictional boundaries.

The other place where we are really going to be incorporating the concept of operational landscape units is in the guidelines themselves. There will be a guideline that tells people to look at the operational landscape unit they are in and look at all

of their neighbors that share a similar set of suitability for adaptation strategies and incorporate them if they are not doing a multi-jurisdictional plan with them, to incorporate those stakeholders into their planning process. We are hoping to encourage it as much as we can without mandating it.

Commissioner John-Baptiste continued: Sorry, just a quick follow-up on this, though. Part of what I think we are trying to avoid is for one jurisdiction to put in place strategies that have either negative or suboptimal consequences to their neighbors.

If jurisdictions are not required to consider how nature will actually behave relative to what they are planning, I do not know that we will achieve that goal. There is a balance, I am sure, between what we require up front and then what we settle for on the back end.

But I do encourage us to think about what that right balance is. Because the point of having a regional agency, in my view, holding responsibility for setting these guidelines is so that we can ensure that the whole is actually taken care of in the best possible manner, and it is really hard to do that from the more fractured perspective that we otherwise fall into as a region. I hope that makes sense.

Ms. Brechwald clarified: Yes. Just to clarify, we will be requiring people to work across jurisdictional boundaries as they develop their strategies. But what we are not requiring is that people submit a multi-jurisdictional plan with their neighbors if they do not want to. In all other cases, we are requiring people to work with their neighbors to look at the shared characteristics and operational landscape unit and to consider adaptation strategies' impacts on neighboring jurisdictions.

Commissioner Vasquez spoke: First, I want to thank Dana and Larry for the presentation to Solano County and the cities. We have an organization called 4Cs where these kinds of things are made available to all the cities and the county itself to talk about these regional concerns no matter what they are. As Larry indicated, there is a willingness on the part of the cities and the county to work together with one plan.

The other thing was, we had a brief conversation afterwards about looking across to our neighbors, Contra Costa and Napa, so we fully plan to at least engage them so that we are not doing something that might impact them or influence water to go one way or the other. Because we can all be, as some of the other Commissioners have said, we can all be very concerned about our own area and not think about our neighbor. I am glad Dana said that. It encourages me to more work then. Thank you.

Chair Wasserman noted: Thank you. I do not see any other Commissioners.

I certainly want to join in my thanks and praise to Larry and Dana and the full staff for the work that has led up to this and is ongoing. There have been times in this process, and I suspect there will be times in the future, when I become a little bit concerned about how much progress we are making and how long it is taking. But I think this indicates that we are making very good progress, at least at this moment in time.

11. Briefing by Ben Hamlington on Sea Level Rise Science. Chair Wasserman stated: That brings me to Item 11, a certainly relevant follow-up, a briefing from NASA on science underpinning of the new state of California Guidance on Rising Sea

Levels. Dr. Benjamin Hamlington of NASA, who led the State of California's Science Panel that formulated the basis underpinning the new state of California Guidance on Rising Sea Levels will make the presentation. We have heard from Dr. Hamlington before, and his briefings have been both interesting and especially tuned for those of us who are not scientists. Cory Copeland, BCDC's lead scientist will introduce the topic.

Adapting to Rising Tides Data and Science Manager Copeland addressed attendees: My name is Cory Copeland. I am the BCDC Adapting to Rising Tides Data and Science Manager. I am excited to introduce this item about the latest sea level rise science that informs the new statewide guidance.

As a reminder for the Commissioners, on February 1 you received a briefing from Dr. Justine Kimball of the Ocean Protection Council on draft Sea Level Rise Guidance.

The public comment for that draft has closed but BCDC staff are actively working with the OPC to support the final draft. We have been told that OPC is anticipating adopting the guidance in June.

At that point, BCDC staff will be updating our own climate policy guidance with respect to the latest science and guidance from OPC. That guidance document is used to inform BCDC permits and planning activities as it relates to our policies.

One thing I want to say is if you look closely at the authorship of the draft guidelines you will see that sections are written by OPC staff, which Dr. Kimball spoke to you about already, and others are written by external scientists.

Today's briefing is by Dr. Ben Hamlington, one of the external scientist authors

of the draft California State Sea Level Rise Guidance. He will specifically offer information on the scientific basis for projections.

Ben Hamlington is a research scientist at the Sea Level Rise and Ice Group at the NASA JPL. Dr. Hamlington is a preeminent expert on sea level rise science, with authorship credits for more than 50 scientific publications on sea level rise and related topics.

I have personally read and cited some of his work. Within the Guidance, Dr. Hamlington is the lead author of the section of the report on the selection and creation of the California sea level rise scenarios. Without further ado I would like to pass it over to him to present some of the scientific updates that went into our new California sea level rise scenarios.

Dr. Hamlington presented the following: Thank you, Cory, and thank you for the invite to present. I do hope that I make this as accessible as I was given credit for in past presentations.

I have a few slides going over the framing of the Report. Some of you may have seen a presentation, Justine and I did a road show of going around and sharing some of the findings and a brief overview of the Report. I am going to go through some of those same elements maybe a little bit quickly.

I have a couple of new items here that are responsive to the public comments that we received so I do want to hit those as well. But a goal of mine is to leave time for questions, which I know based on the public comment on just this process that there are potentially many of those questions, but hopefully, we can address some of those here.

As I said and as Cory nicely updated on, I am really focusing just on Chapter 2 of the Report; this is the science update.

Chapter 3, for those of you who have not seen the Report, is the Guidance. That is the section led by OPC and Justine.

There is a Section 4 of the Report that talks more about impacts. I know those impacts and that Section 4 is tremendously important to all of you and the discussions you are having here, talking about the prevalence and the potential expansion and increased frequency of flooding as we go forward, as well as other impacts such as saltwater intrusion, erosion, things like that.

This is my way of saying I am focused on Chapter 2. It is not at all to diminish the important work that is in Chapter 4. It exists, it is well described in the Report, and it is also being responsive to the public comment. But again, I am just trying to set the framing for what I am covering here, and this is not the entirety of what is in the Report.

What is included in the Report?

There are five sea-level scenarios. That sea-level scenario term/phrase there is already a loaded one based on some of the changes that have occurred. But I do want to spend some time today explaining what those sea-level scenarios are and how they are different than what we have seen in past guidance.

These span the range from 2020 to 2150. They span the range of plausible sea level rise. We do define what plausible means within the Report. I will touch on that briefly here in the coming slides. These have been localized to California.

One of the things to note is that the source material for this is the IPCC Sixth

Assessment Report and this Federal Technical Report which came out in 2021, and 2022.

Billy Sweet and I were the lead authors of the Federal Report. What we are doing is using that scientific basis, that consensus as the starting point to then build something that is, let's say, both specific to California, but also responsive to some of the gaps that existed coming out of that Federal Report.

We did the same kind of thing. After that we briefed it to other agencies, states, localities. We got some feedback that made it clear that there are things we could be doing to make that information more accessible and easier to adopt into guidance. So, within this update we are trying to take some of those lessons learned and provide this update.

In that respect, the California update that I am talking about here is certainly reflective and consistent with those documents, but hopefully is continuing to advance our state of knowledge and how we are describing that state of knowledge.

A couple of ways that it does this is that within this Report we evaluate the most likely scenario. Based on multiple lines of evidence we can actually start to weigh in a little bit more heavily based on our scientific understanding about not just here is a range of scenarios, pick the one you want. But here is a range of scenarios and here is what we can consider most likely and here is why. We are trying to describe that in more detail to really support the implementation and use of these scenarios.

One way we do this is increased use of observations. We have good tide gauge observations. Obviously, I am biased toward satellite observations here at NASA.

But we have these increasingly long records from satellites that we can then use alongside the models to really say something that is more certain and more definitive than ever before.

One last thing to note here is we really do a lot to provide storylines and context for each of our scenarios. I will get more into that in a second, I am not going to dwell on that in this slide.

But an important thing here is that there have been meaningful changes since the 2017 Rising Seas Report. These are driven by the science. This is not some additional research I did while preparing this Report. This is really based on the consensus that was in the AR6, the state of publications here in California, and how we can translate that into a consensus document that hopefully checks the box of what we need here.

The sea level scenarios, so there's five of them. There's the Low, Intermediate-Low, Intermediate, Intermediate-High and High scenario. The ways these are defined, and this is the only point I am going to show meters instead of feet, on this slide, but it is just because they are nice round numbers.

These scenarios are defined by amount of global sea level rise by 2100. The reason for that, the way we build the model-based projections that then lead into the scenarios, is from a global value and then were regionalized off of that.

If we go back to the starting point with the global projections of sea level, we look across the available model results and the scientific literature and we can come up with a plausible range of sea level rise. In this case, in 2100 that is 30 centimeters to 2 meters.

Now, certainly beyond 2100 that number can go far beyond that and before 2100 that plausible range would be narrowed to that. But this is how we start out our scenario formation. Then from there you can start to build in storylines. We do that in detail in this Report and I think we are doubling down on that within our revisions, especially with the public comment. But we can interpret exactly what the future looks like under these different scenarios.

Under the Low scenario, the global community has really gotten its act together, really driven emissions lower, basically gotten to net zero as quickly as possible. That is the most optimistic future.

On the other hand, if we talk about the High scenario, that is a worst case. Emissions have gotten out of control. Not only that, we have triggered some of the rapid ice sheet processes, some of those ice sheet instabilities we think could be a factor, and they are contributing heavily to sea level rise.

Then you have these other three scenarios that are in between. I do want to point out two important ones. The Intermediate-Low at 50 centimeters by 2100 and the Intermediate at one meter by 2100. Those bound what we are calling the most likely range by 2100. Those are important scenarios if we consider the future sea level rise and where we might be headed.

There is one last point I want to make here in terms of some of the terminology used in the Report. We talked about Medium Confidence and Low Confidence. This is mapping directly from the AR6 and the Technical Report. The key here is the level of scientific agreement or consensus, that is really what is being described here.

And maybe you would like to see, well, there is High Confidence among scientists on what is going to happen in the future. Medium Confidence is as far as we will go based on our current modeling or our understanding of the physical processes. But we talk about Medium Confidence, which collects a series of physical processes that we can model as part of these large ensemble efforts.

The Low Confidence processes start to bring in some physical processes that are of less agreement and more uncertain about what is going to happen in the future. Those are your rapid ice loss processes, those instabilities. We do denote between those two and those are built into the scenarios that we are using here.

A key question is the difference between probabilistic projections and sea level scenarios. I have a slide that I am going to go through these others quickly to get to just so I can answer some questions there.

But just looking at some of the numbers, and again, I am just going to go through this briefly because you all can read the Report and get these numbers.

But in terms of the sea level scenarios themselves and the numbers, here on the right, those color lines or the five sea level scenarios, and that dashed line is showing the 2018 H++ scenario. I am just showing one of these for comparison and to say something about that high end process or that the high-end scenario.

Again, the Low to Intermediate scenarios span the Medium Confidence scenarios, those processes. We have a pretty good understanding of the Intermediate to High scenarios, explore that upper range, where we have a little bit less confidence in what is going to happen but want to capture those higher end possibilities.

One thing to note here is that dashed line, you can see at every point in time, is higher than the High scenario. We have had the high-end scenario come down as a result of the science. Again, I have a slide on that in just a couple of minutes here so I will get into that in a second.

One other important thing to note as you go through the Report is that vertical land motion is really the primary driver of local variations. If we think about the ice sheets, the ocean and what is happening there, it is a fairly similar signal whether you are talking about San Diego or Crescent City.

The contribution of the Antarctic Ice Sheet, you are so far away this should kind of make sense. It does not change that much across the California coastline. The same thing with Greenland.

However, if we think about what does drive different differences locally, it is subsidence or uplift that may be occurring in different parts of California.

We can represent a lot of the ocean-driven contributors to future sea level rise by one consistent scenario as we look out across California and then we can bring in the vertical land motion piece. There is almost a separation between the two.

Here are just some of the numbers that I am showing from the Report. This is just to note that we do have numbers at each decade going out to 2150 for each of these scenarios.

Within the Report we also do hone in on this near-term sea level rise these next three decades, 2020 to 2050. An important thing here is the range in 2050 is much smaller than it has ever been before in any of these consensus reports. In 2050, the range is less than 8 inches between the Low and the High scenario. It is

much lower than in the past reports, as I said. The primary reason for that is actually connected to the high-end possibilities and the rapid ice sheet loss processes. I will talk more about why that is the case in just a minute.

It is important to note that our observations are consistent with this Intermediate scenario. It is a little bit hard to see but this red line here is actually a trajectory based on observations around California; it tracks extremely closely to the Intermediate scenario.

This allows us to say that the Intermediate scenario, which is about .8 feet in 2050, plus or minus just a couple inches, should be considered the most likely sea level rise in 2050. For California, we are almost collapsing future sea level rise down to a single scenario if we look out the next three decades.

One last slide here before I get into some of those points that maybe are responsive to the public comments we have received. If we are interpreting the sea level scenarios, one thing we are trying to do in this Report, because we are building the scenarios, we are trying to add context to them with the probabilistic projections.

The scenarios are formed using the probabilistic projections. We set these targets and then we find the probabilistic projections to get to those targets. Then from there, we can start to say something about what is your likelihood of reaching different scenarios.

If I look at this middle row here, what is the probability of passing roughly one meter of sea level rise in 2100 in a 3°C warming future, and my probability is 5% of exceeding that.

On the other hand, I have an 82% chance of exceeding the Intermediate-Low, 50 centimeters by 2100.

The reason that is important is that we can start to make an evaluation of different warming levels and the path that we are on and the likelihood of getting there.

So, 3°C is our current trajectory of warming as evaluated by the IPCC, the Working Group III. You can look down here. That is part of the reason we make this evaluation of a most likely scenario. So, 50% is in between Intermediate-Low and Intermediate. This is our most likely trajectory. This table starts to become very informative to help interpret those scenarios. That is what I said there in the first bullet.

One other thing to note, without rapid ice sheet loss, that is these Low Confidence, these last two columns, the chances of reaching 2 meters by 2100 is effectively zero at warming levels below 5°C.

So, we have in here less than 1%, but these are again I am saying, effectively zero. They are extremely small given the number of actual projections that get us to that value. In order to get to those high-end estimates of sea level rise like the 2 meter by 2100, you really need to have triggered the ice sheet instabilities and the rapid ice sheet loss.

And one thing we really tried to hammer home in this Report is that there is no scientific consensus still on rapid ice loss and the associated processes. That is why they are called Low Confidence. But it is really important when we consider the interpretation of the scenarios and then ultimately the application of the scenario.

So that is the work that OPC is trying to do to understand exactly what these scenarios mean and then how to interpret them as we go forward.

I just have a couple of slides left and then I will stop for questions here.

One thing that has come up, in the 2017/2018 Guidance the starting point was these probabilistic sea level projections. I am using the term here implicit versus explicit construction of scenarios. But the whole goal of these activities is to go from what is a very large number of projections. So, these probabilistic projections, even though there are seven scenarios in the AR6, encompass tens of thousands of sea level projections, because you have different percentiles, you have these different ranges. Ultimately, you need to get down to a discrete set of sea level scenarios. You need to cull that down to a set of three, five, whatever the case may be.

The way that was done in 2017/2018 was to start with the probabilistic projections and then to go to the right to form the scenarios. Here what I say is the advantages of doing that is that you can then attach probabilities directly to the sea level scenarios, which I think you are all familiar with. You would pick a scenario, you could see the likelihood or the different range or probabilities associated with that scenario, then you were off and running.

However, based on the previous report, how it was interpreted as well as other examples throughout the landscape of planning, there are a lot of downsides to doing this.

The underlying assumptions that you make in doing this get lost. If I'm looking at a probability, it is important to consider that there is a probability associated with the scenario or the SSP or the warming level that you have selected. If I go and just

use my probability as is, my probabilistic projection, you have detached it from that first decision.

And similar to that, you are actually making scientific decisions during that down-select process. So, the process of getting here to here, you are saying something about what you think the science is saying about the likelihood of different scenarios and projections. It is blurring that gap between say Chapter 2 in this report and Chapter 3 in this report. We are not providing the clear scientific evidence that allows guidance to be built.

The last point here, there are possible big shifts that can occur from one update to the next, we see that with the H++.

Now, if we work back the other way, and I will just go over this quickly, here what we are doing is defining the discrete sea level scenarios on the right and then we are providing the context with the probabilistic projections on the left.

The pros of this, the underlying assumptions associated with your sea level scenarios are explicit, they are very clear, they are directly attached. The likelihood of assumptions themselves can then be factored in. That type of statement I said about the 3°C future, I can start to say something about the most likely scenario as a result.

They are intended to be more robust to scientific updates, which is important. And I think an important thing here is that they are going to be in line with the federal guidance and National Climate Assessment going forward. That will make the process of updating, of writing a report like this a little bit easier in the future.

There are certainly some downsides to this. One, you have to actually start

and define the plausible range and the scenario definitions at the starting point. I say that is a con, but it is really not that difficult to do because we can look at the projections in advance, we can look at the scientific literature. The AR6 provides the guide to actually coming up with that plausible range.

And then the last thing is the exceedance probabilities come at the end. So, it is additional context that you have to put on top of the scenarios. Again, it is not an either/or. These things are directly related to each other and very important to consider. But this is why part of the reason we are adopting the sea level scenario framing as opposed to the probabilistic projections.

What happened to the H++?

Nothing, it has just been updated. I have hit on this already. The exact same modeling group using a similar but updated model that was used to support the formation of the H++ scenario in 2017/2018 has been used here in these Low Confidence scenarios that helped build the High estimate.

We have not changed anything, there is not some new model that we have said now we need to consider this. It is the same line of evidence that has been updated, a very simple way to put it. If you want to call that same line of evidence H++ in the past, then you can call the same line of evidence that leads to our High scenario similar to H++ or interpreted in that way here.

The key finding there is that more warming is needed to trigger the instabilities that would lead to significant sea level rise. In order to get to more warming that is further out into the future, and it just pushes the High end sea level rise further out into the future. It is the when, not if. We have pushed those

possibilities further out as we go.

One of the things to note is that the AR6 only generated two Low Confidence scenarios, looking at one high warming, one low warming. You could actually generate these Low Confidence scenarios for any level of warming. Just because they are not in the Report does not mean they do not exist; it just means they were not computed.

Again, if you are trying to interpret one of those versus the other you have to be very careful about how you interpret those probabilistic projections. There were methodological choices made to generate that suite of scenarios and then those that impact your guidance.

One last note, we have gotten a lot of feedback about not considering these Low Confidence scenarios. Examples of this are a report came out of New Zealand and also one came out of Maryland. They acknowledged the existence of these Low Confidence scenarios and largely say there they are not going to consider them in the production of guidance.

Based on scientific understanding and our level of consensus within the AR6, there is very little scientific justification for doing this, for disregarding them entirely. They are plausible, to use that word, and they are still being evaluated from a research perspective.

But one thing to note is that we can really do a good job of explaining these processes, these scenarios, in a way that helps support the formation of guidance like that in Chapter 3. I do not think they should be disregarded but they should be communicated clearly and then that should impact how they are used in guidance.

Vertical land motion is another one. In particular for the Bay Area there were questions about the Alameda Tide Gauge versus the San Francisco Tide Gauge. The reason I bring those up is that the Alameda Tide Gauge had a positive rate of vertical land motion, so it was actually evaluated to be uplifting slightly, whereas the San Francisco Gauge was identified to be stable or maybe slightly subsiding.

I am showing this very complicated figure, but we have gone into more detail within the past couple of months here looking at satellite observations, looking at GPS, looking at tide gauges, looking at the difference between satellite altimetry and tide gauges, and we are able to provide much better context for the vertical land motion that we see. As an example, for Alameda, two of our methods indicate uplift, two of our methods that are more directly tied to the observations indicate a similar level to what you see in San Francisco. I think this is information we can help communicate and then allow people to understand how to implement that.

That really goes back to the point that a lot of the drivers of sea level rise are consistent across the California coastline and then we can make adjustments based on the vertical land motion that you choose to adopt and implement.

I think in particular there is an example in San Rafael of very high rates of subsidence that are present there that we see in the satellite observations but are just not captured. There is no GPS station there, they are not capturing the projections. But that kind of analysis and additional information that we really need to try to support the implementation of these scenarios.

I have key takeaways, but I will just leave those up because I have said them probably four different ways by now, and I would be happy to take any questions.

Chair Wasserman asked: Any comment or questions from the public, Sierra?

(No members of the public addressed the Commission.)

Chair Wasserman continued: Thank you. Commissioner Eklund.

Commissioner Eklund was recognized: Great presentation. Very interesting.

To what extent is your Report going to be looking at the extrapolation of sea level rise at different points throughout the San Francisco Bay?

For an example, when we get the Report am I going to be able to look at it to see what the potential sea level rise is for Bahia or Bel Marin Keys or some others as you go up towards the Bay? Because obviously there's a lot of different ramifications that could influence your projections so kind of curious on that. And I will probably have a follow-up.

Dr. Hamlington answered: A quick answer to that is the projections themselves, the scenarios are in a one degree grid. We do provide greater levels of information on the vertical land motion. If we do choose to include that insular map that is like 50 meter resolution, so extremely high resolution information.

I think the important point here is that the processes that we are modeling and representing within the scenarios are known to vary only on large spatial scales. So they vary on a regional level.

Now, when you start to think about the impacts that background sea level rise could drive up in the Bay in these different areas, that is where you really need more local information and more detailed study. This is really just providing a foundation, it is a starting point upon which, again, more detailed information is needed to be brought in to understand the impacts at specific locations.

Commissioner Eklund asked: How would we be doing the next step so that if we needed to do that additional level in order to be able to project whether Bahia will be completely underwater? You know, the houses for an example, because they have wetlands underneath them. How is that going to be done, how is that going to be paid for?

Dr. Hamlington replied: I should separate things a little bit here. Because we are looking at the mean sea level, right? I could easily take, and this work is done in a lot of areas. You could take a digital elevation model and I could couple that background sea level rise and see areas that might be at threat of being underwater. So, I can bring in higher resolution information.

I think the way I was answering that is in a nod to what is in Chapter 4, where you start to think more about the flooding, the frequency of flooding, the severity, and just more detailed information. From a screening level assessment you could use that mean sea level that I am talking about here, relative to elevations and say something. But I think to do something more comprehensive, that does get into a separate section of the Report, which there is certainly expertise to do that kind of work and to support that transition from this foundational sea level rise into something that is more meaningful at a local level.

Commissioner Eklund acknowledged: Great. Would you be amenable to working with the cities and the counties specifically to be able to get down to that level of detail to help us in development of these plans?

Dr. Hamlington explained: My role is to support, let's say, the projections. My role, to be clear, at NASA, it is pretty large scale, we look at global scales and

how that relates to the local level. That being said, other authors on our Report are experts in some of these topics. We have members from USGS, from academia, people who have worked in detail and I know support the state and local communities in a number of ways addition to OPC and other areas that help support the rollout of this and the implementation of it I guess I should say.

Executive Director Goldzband chimed in: If I can jump in for a second, Pat. I see Cory nodding his head and I wanted to give Cory a chance to talk given the locality that he is working on, meaning the Bay shoreline.

Mr. Copeland commented: Yes, thank you so much. I just wanted to highlight some of the work that thanks to the close coordination that OPC has done with us, we have been able to see some of these numbers and start to integrate it into how we are approaching developing the hazard scenarios for the Regional Shoreline Adaptation planning.

We have taken the scenarios for timelines 2050, 2100, and used existing regional hydrological models that do a better job expressing some of those local variances for both baseline sea level rise scenarios, scenarios with storm surge, as well as groundwater rise. We are doing the work to try to translate this guidance into really meaningful information that will hopefully support local governments as they are preparing the plans and also ourselves as we do our own planning work and regulatory review and things like that.

Commissioner Eklund asked: Cory, at what point would that information be available? Because I think that the sooner we start becoming aware of what the implications are for current land uses the better we are able to help make sure that

this is going to be a smooth transition.

Mr. Copeland replied: Yes. I guess there are two sides of it; one side is on the OPC side and then the other is on our side. On the OPC side, which probably would wait until it is officially adopted, hopefully in June, to just make sure it is the official state guidance.

Then additionally on our side, we have been going through a rigorous process with a data and mapping subcommittee under the RSAP to review all of this and to make sure that our regional experts on these things are in agreement that our approach is reasonable to translating this data.

Once we are really confident in that I think that is when it would become available. Minimally before the guidance is complete, we definitely are going to have this available for people as a form of technical assistance to anyone developing the plans.

Commissioner Eklund acknowledged: Great. I think it is important that at least the elected officials and the staff in each of the counties have an opportunity to get a heads up on that information. Do not forget to involve the elected officials in that, because if we are not kept informed of what the implications are we could get blindsided.

I think that based on the potential implications and ramifications in different areas it could be problematic. The sooner we can start sitting down and having some discussions I think the better.

Commissioner Gunther was recognized: I have just a couple of things that I want to make sure I understand and then a couple of questions. If I understand this

correctly, no matter what the scenario that we are considering, the rate at which sea level rise is going to be going up will be higher at the end of the century than it is right now; is that correct?

Dr. Hamlington answered: Except for the Low scenario, so it is a correct statement. An underlying assumption of the Low scenario is that the current rate continues. But every other scenario your statement is correct, the rate will accelerate and will be higher at the end of the century, yes.

Commissioner Gunther continued: Okay. And no matter the scenario, well, I guess maybe we are defining the Low scenario out of this, but that sea level will continue to rise into the 23rd century.

Dr. Hamlington stated: That is correct.

Commissioner Gunther continued: Okay. Then for the fact that H++ is gone, that's lovely news, you do not get to hear that kind of thing too much. Is that because we are projecting less warming than we were 10 years ago or is it because we have a different understanding of ice sheet dynamics?

Dr. Hamlington explained: I wish it was gone, it has more been updated. It is the latter. We have updated our understanding of those potential processes, or at least that one modeling group has. When I say that there is more warming needed to trigger those processes, that is the evaluation. It is basically having the same underlying assumptions about how we get to different warming levels in the future.

It is just that instead of, I will just throw out some numbers, instead of needing 3° Celsius of additional warming by 2100 to potentially trigger those ice sheet processes, now, it is maybe 4° Celsius. The H++, I use that when not if framing.

Instead of two meters being possible by 2100, if I were to look out to like 2120, 2130, it starts to come back on the table. So, we have pushed things out a couple of decades.

Commissioner Gunther acknowledged: Okay, great. My last question is about vertical land motions. Vertical land motions are gradual processes as opposed to vertical land motions in places where you get subduction earthquakes where the land can move a foot or two in a minute. We are not considering those kinds of land motions in California when we talk about the future of sea level rise.

Dr. Hamlington agreed: That is correct, yes. We are assuming certain processes and ones that we think we can reasonably predict or project out into the future. That is like the slower scale processes that is largely driven by the current rate that we see in vertical land motion.

Commissioner Gunther discussed hypotheticals: But if we were actually, if we were in Seattle or we were in Prince William Sound or somewhere where those kinds of subduction earthquakes are more common, then there could be vertical land motions that could happen very quickly that would change sea level.

Dr. Hamlington concurred: Yes. American Samoa is kind of the poster child for that. Where there was an earthquake in 2010 that caused a shift and then the rate of subsidence increased by almost an order of magnitude as a result of that. Yes, they have an extremely high rate of relative sea level rise as a result. Those things can happen.

Commissioner Gunther stated: Well, they are parts of Prince William Sound where old intertidal habitat is way up above current sea levels because of the Great

Alaska earthquake and that happened in a matter of minutes. Thank you so much. It was a great presentation.

Dr. Hamlington acknowledged: Thanks.

Commissioner Showalter chimed in: Anyway, just to respond real quickly to Andy Gunter's comment about vertical land motion. In the Bay Area we have had significant land motion in the South Bay anyway due to groundwater extraction and San Jose has dropped over 12 feet in the early 1900s. That land subsidence has been stopped because of really aggressive groundwater motion.

But there is quite a bit of subsidence that is occurring in the Central Valley due to groundwater extraction. I just wanted to mention that it is not just earthquakes, it is also groundwater extraction, but at the moment that is not one of our problems. Thank you.

Dr. Hamlington added: Yes, it is a good point. That is part of the satellite analysis that we have done. It is for the entirety of California, not just the coastal areas, so you can see a lot of those signals pop out.

Katie Hagemann in San Rafael has been looking at this in detail. There is an extremely high rate of subsidence on the order of almost a centimeter per year. It is an order of magnitude greater than the sea level rise that we see in a lot of locations. With satellite observations we are able to identify that. With that understanding it allows her to better plan for her community and provide better projections.

I do think these other types of data analysis that are very available here in California should be relied on to really start to constrain some of those additional

factors. It is a very good point. There are a lot of different drivers of vertical land motion that we need to consider.

Chair Wasserman noted: I do not see any other hands up for questions or comments.

Executive Director Goldzband asked: Can I ask to make one comment, Chair Wasserman?

Chair Wasserman replied: Of course, yes.

Executive Director Goldzband continued: Cory and I had a little discussion this morning knowing that Ben was going to be presenting what he is presenting and we talked through, so how do we talk about this to the Commission ultimately.

After the OPC approves whatever it is going to approve, Cory and the team are going to be analyzing it. Not that they have not already started, for heaven's sake, as Cory said. We will schedule a presentation for the Commission about how we will use that guidance in the future, just as I think we did in 2018 or 2019 but we are looking that up just to make sure.

Because your permit staff uses this kind of information on a daily basis, and we want to make sure that you understand how our staff will be using it. And this is news to Ben but we are going to invite him back for that just so he can take a look at it and give his analysis, which he will do certainly through the system. So, you will see him again soon.

Chair Wasserman acknowledged: Thank you.

Dr. Hamlington stated: I appreciate the opportunity to present and thanks for your questions.

Chair Wasserman continued: Thank you very much for the presentation. We look forward to the next one, as Larry indicated.

12. Adjournment. There being no further business, upon motion by Commissioner Eklund, seconded by Commissioner Nelson, the Commission meeting was adjourned at 3:44 p. m.

Respectfully submitted,

A large, stylized handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the bottom.

LAWRENCE J. GOLDZBAND
Executive Director

Approved, with no corrections, at the
San Francisco Bay Conservation and
Development Commission Meeting
of May 2, 2024.

A large, stylized handwritten signature in black ink, featuring a prominent loop at the top and a long horizontal stroke extending to the right.

R. ZACHARY WASSERMAN, Chair